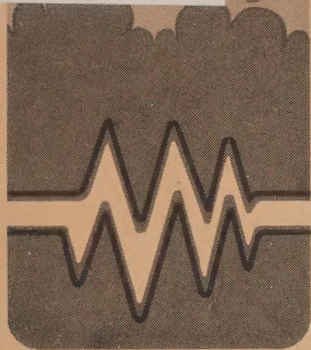


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# REGIONAL EARTHQUAKE SAFETY ISSUES AND OBJECTIVES



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# **Regional Earthquake Safety Issues and Objectives**

## **Introduction**

This document suggests the appropriate roles of the Association of Bay Area Governments in the area of earthquake safety. It has been prepared in response to requests from ABAG constituents who are attempting to comply with Federal and State requirements. These goals, objectives, and policies were developed to help ABAG's member governments coordinate effectively with each other and with the State and Federal governments.

This description is divided into two sections. The first section defines those earthquake safety issues of major significance to the region. The second section suggests the goal and objectives of ABAG's planning program in response to the issues, and lists those techniques available for implementing the objectives.

## **Issues**

Earthquakes and other disasters pose a serious and continuing threat to life, property, and the general welfare of the region. The following issues summarize the problems associated with existing earthquake preparedness work.

### **ISSUE 1: THE NEED FOR A UNIFORM LEVEL OF AWARENESS**

BECAUSE OF THE COSTS OF MITIGATION AND THE INFREQUENT OCCURRENCE OF SIGNIFICANT EARTHQUAKE DAMAGE, EARTHQUAKE PREPAREDNESS DOES NOT RECEIVE THE COMMITMENT THAT IT SHOULD.

MUCH TECHNICAL INFORMATION IS AVAILABLE ON EARTHQUAKES THAT HAS NOT BEEN ADEQUATELY COMMUNICATED TO CITIZENS, PUBLIC AGENCIES, OR THOSE INVOLVED IN LAND DEVELOPMENT.



ISSUE 2: ENSURING SOCIAL AND ECONOMIC STABILITY

BUSINESS QUARTERS ARE DESTROYED OR RENDERED INOPERABLE IN A SEVERE EARTHQUAKE, LEAVING PEOPLE UNABLE TO WORK AND BUSINESSES UNABLE TO FUNCTION. TWO CONFLICTING VIEWS EMERGE DURING RECOVERY. MANY PEOPLE ARE UNWILLING TO HAVE BUILDINGS REBUILT IN THE SAME WAY AND IN THE SAME PLACE, AND VIEW REBUILDING AS A MEANS OF MINIMIZING DAMAGE FROM FUTURE EARTHQUAKES; MANY OTHERS ARE EAGER TO REBUILD AS RAPIDLY AS POSSIBLE TO REGAIN ECONOMIC STABILITY.

ISSUE 3: UNCERTAIN LEGAL AUTHORITIES

THE PRESENT UNCERTAIN AND AMBIGUOUS LEGAL SITUATION RELATED TO GEOLOGIC AND SEISMIC HAZARD REDUCTION MEASURES IMPEDES LOCAL WILLINGNESS TO ACCOMPLISH THIS GOAL.

ISSUE 4: EFFECT OF EARTHQUAKE PREDICTION

THE POSSIBILITY OF EARTHQUAKE PREDICTION RAISES COMPLEX LEGAL, SOCIAL, AND ECONOMIC ISSUES OF IMPORTANCE TO LOCAL GOVERNMENT.

ISSUE 5: NEED FOR GREATER COORDINATION

THE INDEPENDENT DEVELOPMENT OF EARTHQUAKE PREPAREDNESS PROGRAMS OF PUBLIC AGENCIES, RESEARCH ORGANIZATIONS, AND LOCAL GOVERNMENTS HAS LED TO

- a: INADEQUATE USE OF AVAILABLE TECHNICAL INFORMATION,
- b: RESEARCH AND PLANNING EFFORTS THAT DO NOT FULLY CONSIDER REGIONWIDE IMPACTS

OR REGIONWIDE MITIGATION MEASURES ASSOCIATED  
WITH MAJOR EARTHQUAKE DISASTERS, AND  
c: INCONSISTENT PLANNING IN NEIGHBORING AND  
OVERLAPPING JURISDICTIONS.

## **Goal, Objectives, and Activities**

The general goal of this program is to assist local governments in minimizing the loss of life and property damage and in averting the economic and social instability that could result from a major earthquake.

The seven objectives listed on the following pages are aimed at achieving this goal. The first three stress greater commitment to predisaster hazard abatement, emergency response during and immediately following an earthquake, and post-disaster recovery. The last four respond to the issues of economic stability, liability, program coordination, and public information.

Some earthquake safety objectives may be an appropriate part of a local or State program, as well as ABAG's regional program.

The activities listed after each objective are grouped according to the following three regional planning and coordinating functions that ABAG now performs:

### **1. PLAN AND PROJECT REVIEW**

As the designated areawide clearinghouse, ABAG reviews local plans and projects that propose to use Federal and State funds. The activities listed under the clearinghouse function would serve as guidelines in the review of all such plans and grant applications.



2. SERVICES TO LOCAL GOVERNMENT

With adoption of the activities listed below, ABAG would assist local governments in obtaining information and developing implementation measures at the local level.

3. ADVOCACY

As an advocate for regional concerns at the State and Federal level as well as in the private sector, ABAG would work to have the region's earthquake safety goals and objectives implemented through such means as suggesting new legislation and taking positions or commenting on proposed legislation and regulations.

**Objective 1:** TO HELP ENSURE THAT ADEQUATE COMMITMENT IS MADE TO  
EARTHQUAKE HAZARD REDUCTION

1.10 Implementation via ABAG's Plan and Project Review Function

Activity 1.11: To encourage local governments to reduce earthquake risks, ABAG will review and comment on the adequacy of local plans and seismic safety programs with respect to:

- a. procedures for the identification and assessment of geologic and seismic hazards and their impacts,
- b. provisions for the timely adoption of the latest edition of the Uniform Building Code, and amendments deemed necessary for local conditions, and



- c. procedures for implementing and enforcing ordinances to identify, inspect and abate hazardous structures or structural components.

Activity 1.12: ABAG's review comments on development proposals will address

- a. the completeness of the description of geologic and seismic hazards affecting the site,
- b. an evaluation of those problems in relation to the proposed development, and
- c. provisions that additional engineering precautions will be taken when necessary to mitigate these hazards.

#### 1.20 Implementation via ABAG's Service Function

Activity 1.21: ABAG will offer planning and informational assistance, as available, to member governments in initiating, refining, and improving their seismic safety programs.

#### 1.30 Implementation via ABAG's Advocate Function

Activity 1.31: ABAG will advocate and support State legislation to strengthen current seismic safety program guidelines, criteria, and procedures, and will request State funding for refining and updating seismic and related general plan elements.

Activity 1.32: ABAG will advocate and support State and Federal legislation to fund the implementation of local seismic safety programs.

Activity 1.33: ABAG will advocate and support State and Federal legislation to fund the rebuilding or structural modification

of hospitals and other emergency facilities that do not meet current State requirements.

Activity 1.34: ABAG will advocate and support development at State and Federal levels of model codes and ordinances that approach building and foundation design and site planning from an interdisciplinary point of view, so that both structural and functional failure are addressed.

Activity 1.35: ABAG will advocate and support State legislation that will require geologic and seismic investigations which are consistent with the hazard and the use proposed.

**Objective 2:** TO HELP ENSURE THAT ADEQUATE COMMITMENT IS MADE TO IMPROVING EMERGENCY SYSTEMS

2.10 Implementation via ABAG's Plan and Project Review Function

Activity 2.11: ABAG will comment upon local safety programs by stating whether or not

- a. current County or City earthquake emergency plans have been approved by the California Office of Emergency Services (OES),
- b. the jurisdiction regularly participates in periodic local and multijurisdictional disaster exercises, and
- c. provisions are made for planning the general emergency response made necessary by new projects.

Activity 2.12: ABAG's comments on development proposals will include a review of the description of the probable



emergency consequences of destructive earthquakes that might effect the development.

#### 2.20 Implementation via ABAG's Service Function

Activity 2.21: ABAG will offer planning and informational assistance, as available, to member governments in refining and improving their capabilities for responding to earthquakes.

Activity 2.22: ABAG will provide, when appropriate, a forum for developing regionwide earthquake safety functions in cooperation with the State.

Activity 2.33: ABAG will make its Hazards Evaluation booklet available to member governments and will provide, as available, assistance in its use.

Activity 2.24: ABAG will provide assistance, as available, to member governments in collecting information for the public in both the operational and planning aspects of earthquake preparedness.

#### 2.30 Implementation via ABAG's Advocate Function

Activity 2.31: ABAG will advocate and support appropriate State and Federal legislation to fund the improvement and increased enforcement of standards for assuring continuity of operation of vital facilities and services during an earthquake emergency.

Activity 2.32: ABAG will advocate and support appropriate State and Federal legislation to strengthen emergency planning and operating programs.

**Objective 3:** TO TAKE FULL ADVANTAGE OF THE LONG-TERM RECONSTRUCTION FOLLOWING AN EARTHQUAKE TO AVOID HAZARDOUS AREAS AND CONDITIONS AND THEREBY REDUCE THE RISK FROM FUTURE EARTHQUAKES

3.10 Implementation via ABAG's Plan and Project Review Function

Activity 3.11: ABAG will comment on the completeness of local plans and seismic safety programs by evaluating their description of a planning process for rebuilding in a manner to minimize public hazards from future earthquakes.

3.20 Implementation via ABAG's Service Function

Activity 3.21: ABAG will provide the forum for raising and studying public safety and economic questions that arise when local governments review or develop reconstruction policies following an earthquake disaster.

3.30 Implementation via ABAG's Advocate Function

Activity 3.31: ABAG will advocate and support State and Federal legislation to foster the development and implementation of reconstruction policies reducing public hazards and economic vulnerability from future earthquakes.

**Objective 4:** TO HELP LESSEN THE POTENTIAL FOR SEVERE ECONOMIC HARDSHIP FOLLOWING AN EARTHQUAKE

4.10 Implementation via ABAG's Plan and Project Review Function

Activity 4.11: ABAG will comment on the completeness of local plans and seismic safety programs by evaluating their recognition of State and Federal sources



of economic aid.

#### 4.20 Implementation via ABAG's Service Function

Activity 4.21: ABAG will offer assistance, as available, to member governments in estimating the potential physical and economic consequences of destructive earthquakes using the methods described in the ABAG Land Capability Analysis and Hazards Evaluation reports.

#### 4.30 Implementation via ABAG's Advocate Function

Activity 4.31: ABAG will advocate and support means to help restore economic stability after an earthquake, including new legislation and research studies.

Activity 4.32: ABAG will encourage OES to prepare an annual list of State and Federal sources of economic aid.

**Objective 5:** TO CLARIFY THE PRESENT UNCERTAIN AND AMBIGUOUS LEGAL SITUATION RELATED TO GEOLOGIC AND SEISMIC HAZARD REDUCTION MEASURES AND EARTHQUAKE PREDICTION

#### 5.10 Implementation via ABAG's Service Function

Activity 5.11: ABAG will seek funds to research the legal issues confronting local governments relating to earthquake and earthquake prediction activities and to provide this information to local governments.

#### 5.20 Implementation via ABAG's Advocate Function

Activity 5.21: ABAG will advocate and support State and Federal legislation clarifying the legal issues confronting public agencies for geologic and seismic hazards and earthquake prediction.

## **Objective 6:** TO IMPROVE EARTHQUAKE SAFETY PROGRAM COORDINATION

### 6.10 Implementation via ABAG's Plan and Project Review Function

Activity 6.11: ABAG will encourage local governments to identify and resolve inconsistencies between their own seismic safety standards and those of neighboring jurisdictions.

### 6.20 Implementation via ABAG's Service Function

Activity 6.21: Hazard reduction measures will be considered in the assessment portion and other appropriate sections of the ABAG environmental management planning effort (associated with Section 208 of the Federal Water Pollution Control Act Amendments).

Activity 6.22: ABAG, in cooperation with the State, will provide a forum for coordination of emergency service functions, when appropriate.

Activity 6.23: ABAG will work for better cooperation between the Public Utilities Commission, utilities and local governments in disaster preparedness.

### 6.30 Implementation via ABAG's Advocate Function

Activity 6.31: ABAG will advocate and support State and Federal legislation providing funds for developing a comprehensive method for identifying and evaluating the physical, economic, and social impacts of a destructive earthquake.

## **Objective 7:** TO INCREASE PUBLIC AWARENESS OF EARTHQUAKE PROBLEMS



7.10 Implementation via ABAG's Plan and Project Review Function

Activity 7.11: ABAG will urge local governments to include provisions in their plans and earthquake safety programs to ensure disclosure of areas of known geologic hazards and hazardous buildings.

7.20 Implementation via ABAG's Service Function

Activity 7.21: ABAG will publish periodic and timely messages on programs available on T.V., radio, or other media.

Activity 7.22: ABAG will assist member governments, on request, in collecting, developing and disseminating information to the general public (including non-English speaking people) and to public service agencies (such as utilities and financial institutions) in all aspects of earthquake preparedness.

Activity 7.23: Subject to funding, ABAG will provide workshops on reduction of geologic and seismic hazards.

7.30 Implementation via ABAG's Advocate Function

Activity 7.31: ABAG will advocate and support State and Federal legislation to ensure disclosure of known geologic and seismic hazards.

